

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1- 3. (canceled).

4. (currently amended): An electric power converter ~~including~~ comprising:

a main circuit unit ~~including~~ comprising:

a converter unit configured to convert a first alternating current (AC) voltage into a direct current (DC) voltage;

a switching unit that performs comprising a switching element configured to convert from a the DC voltage including a DC voltage generated from an into a second AC voltage, wherein the second to an AC voltage having has an arbitrary frequency and an arbitrary voltage, and that outputs the second AC voltage is supplied to a load; and

a first storage unit configured to store at least: characteristics of the main circuit unit, calibration values of the plurality of detectors, a production history, an operation history, and specifications of the main circuit unit; and

a plurality of detectors; and

a control unit including comprising a second storage unit that prestores configured to prestore setup information, wherein the setup information includes a concerning setting for

driving a ~~the~~ load, ~~that~~ which includes an operating mode of the load or ~~concerning a~~ setting for display,

~~wherein the the control unit controlling a~~ is configured to control the switching element that is a component of the switching unit to reach a desired on or off state based on: information concerning an operation of the load preset by the second storage unit, and ~~based on~~ information emitted from various provided by the plurality of detectors included in the main circuit unit so that the switching element reaches a desired on/off operational state,

wherein the main circuit unit and the control unit are detachably attached to each other; ~~and~~ such that the control unit can be replaced with another control unit ~~differing in a control manner can be newly attached to the single main circuit unit~~ which is different from the control unit, and

~~wherein the main circuit unit includes a storage unit that stores at least characteristics concerning the main circuit unit, calibration values with respect to the various detectors, a production history, an operation history, and specifications.~~

5. (new): The electric power converter according to claim 4, wherein the plurality of detectors further comprise a current detecting unit configured to detect an electric current flowing between the switching element and the load.

6. (new): The electric power converter according to claim 4, wherein the plurality of detectors further include:

an output voltage detecting unit configured to detect the second AC voltage;

a DC voltage detecting unit configured to detect the second AC voltage; and

a temperature detecting unit configured to detect a temperature of the switching unit.

7. (new): The electric power converter according to claim 4, further comprising a communication circuit configured:

to receive the production history and the operation history from the first storage unit; and

to send the calibration values of the plurality of detectors to the control unit.

8. (new): The electric power converter according to claim 4, wherein the main circuit further comprises a harness having a first connector attached thereto,

wherein the control unit further comprises a second connector which is disposed on a side wall surface of the control unit, the control unit being united to the main circuit unit, and

wherein the main circuit unit and the control unit are electrically connected by connecting the first connector and the second connector.

9. (new): The electric power converter according to claim 4, wherein the main circuit further comprises a first connector disposed on a side wall surface of the main circuit unit,

wherein the control unit further comprises a second connector disposed on a side wall surface of the control unit,

wherein the side wall surface of the control unit is configured to be brought into contact with the side wall surface of the main circuit as the first connector is simultaneously brought into contact with the second connector, thereby creating an electric connection between the control unit and the main circuit unit.

10. (new): The electric power converter according to claim 4, wherein the control unit performs open-loop control, and the another control unit performs closed-loop control.

11. (new): A method of replacing a control unit with another control unit, the method comprising:

detaching a first connector of a main circuit from a second connector of the control unit;

removing the control unit and second connector from the main circuit unit;

mounting the other control unit onto said main circuit unit, said other control unit having a third connector;

connecting the first connector to the third connector; and

copying characteristics from a first storage unit of the main circuit unit to a second storage unit of the other control unit, wherein the characteristics comprise calibration values of a plurality of detectors, a production history of the main circuit unit, and specifications of the main circuit unit.